

absorbing color coating or layer 24. A transfer adhesive 48 and peel-off liner (e.g. a paper backing) 50 are applied to the remaining free side surface (in this case the left side surface) of the transparent panel 12. The entire assembly is perforated with through-holes 42. FIG. 6D shows the embodiment of FIG. 6C with the peel-off liner 50 removed and the assembly mounted to a window 32.

In the two interior mount embodiments of FIGS. 6A-6B and 6C-6D, the image contained in the image coating or layer 22 is visible when the display panel assembly is viewed from outside the window 32 in a direction through the window 32 and transparent panel 12 towards the image coating or layer 22. The display panel assembly appears transparent when viewed from the opposite direction (i.e. from inside the window. That is, a person on the right side of the panel assembly may see through the panel assembly with virtually no noticeable obstruction.

In addition, a non-perforated backing layer (not shown) may be applied to the perforated backing layers 46 and 50 as shown in the embodiments of FIGS. 6A & 6C to facilitate handling of the panel assembly during fabrication of the panel assembly.

FIG. 7 shows an example of an exterior mount embodiment comprising an opaque white panel 40 having opposed flat faces with an image coating 22 on one face and an opaque light-absorbing color coating 24 on the opposite face. Coating 24 may also comprise a light-absorbing material layer. As shown in FIG. 7, an optional transfer adhesive layer 52 and non perforated peel-off protective liner 54 may be applied to an exposed side surface of the assembly (in this case the light-absorbing color coating or layer 24). The protective liner 54 facilitates handling of the assembly before it is applied to a display medium (eg. a window).

It is important to note that when the protective liner 54 is removed, those portions of the adhesive layer 52 which overlie the through-holes 42 are also carried away along with the liner 54 so that the clarity of vision through the display panel assembly in the through-viewing direction (i.e. from right to left) is not impaired.

FIG. 8 shows a view similar to FIG. 7 but showing the through-holes 42 in the assembly with the image layer 22 being on the outer face of the light-absorbing or darkened layer 24. In this embodiment, the panel 12 is preferably transparent.

In all cases with respect to the embodiments shown in FIGS. 6-8, a person looking in the through-viewing direction (i.e. from right to left) will not see the image on the image coating or layer 22 but will see the field of view to the left of the assembly by looking through the through-holes 42. On the other hand, a person looking from left to right in each of the embodiments illustrated in FIGS. 6-8, will view the image on the image coating or layer 22.

FIG. 9 shows another embodiment of the invention which is adapted for exterior mount applications and which includes a outer transparent protective layer 52 provided to the image coating 22. The outer transparent layer 52 preferably has ultra violet (UV) protective properties to protect the inks and dyes of the image coating 22 from color degradation due to prolonged exposure to sunlight.

FIG. 10 shows another embodiment of the invention similar to that shown in FIG. 9 but which includes a non-perforated one way mirror layer 56. In this embodiment, the mirror side of the one way mirror layer 56 is oriented towards the light reflecting direction, i.e. towards the image coating 22. The mirror layer 56 provides security in that it prevents vision through the display panel assembly in one direction. This embodiment may be used to provide building

security such as by placement on the windows of a kiosk or room within a casino or store. In such an environment, the display panel assembly may be used to shield from public view hidden cameras or security personnel which are monitoring the events that occur within the casino or store. Alternatively, the one way mirror layer 56 can also be incorporated within other panel assembly embodiments such as those disclosed herein as desired.

It should be understood that various modifications within the scope of this invention can be made by one of ordinary skill in the art without departing from the spirit thereof. We therefore wish my invention to be defined by the scope of the appended claims as broadly as the prior art will permit, and in view of the specification if need be.

What is claimed is:

1. A one way vision display panel assembly specially constructed for pressure sensitive application onto a window of a building or vehicle, said one way vision display panel assembly comprising:

a) a perforated panel assembly including:

i) a perforated transparent panel formed of a flexible plastic sheet material having a front surface and a rear surface;

ii) a perforated protective liner;

iii) pressure sensitive adhering means disposed between said front surface of said perforated transparent panel and said perforated protective liner for removably adhering said perforated transparent panel to said perforated protective liner so that said perforated protective liner can be peeled off from said perforated transparent panel to permit pressure sensitive application of said perforated transparent panel to a clear substrate;

b) said rear surface of said perforated transparent panel having applied thereon a first coating of light-reflective color bearing an image followed by a second coating of an opaque color sufficiently dark for absorbing light, wherein:

i) said perforated panel assembly appears substantially transparent when viewed from a first direction;

ii) said image is clearly visible when said perforated panel assembly is viewed from a second, opposite direction; and

c) a non perforated backing layer removably attached to said perforated protective liner, wherein said non perforated backing layer being effective to facilitate handling of said perforated panel assembly.

2. A one way vision display panel assembly according to claim 1 which includes a non perforated mirror film layer disposed between said perforated protective liner and said non perforated backing layer.

3. A one way vision display panel assembly according to claim 1 wherein said non perforated backing layer comprises mirror film material.

4. A one way vision display panel assembly according to claim 1 wherein:

a) the perforated panel assembly is provided with through-holes of a substantially uniform hole size in a range of about 0.001" to 1.0"; and

b) said through-holes are arranged in a staggered hole pattern to provide an open area in a range of about 40% to 70% and to permit the perforated panel assembly to conform to compound curved surfaces of a clear substrate without wrinkling.

5. A one way vision display panel assembly according to claim 1 wherein said pressure sensitive adhering means

11

comprises static cling properties provided to said perforated transparent panel.

6. A one way vision display panel assembly according to claim 1 wherein said pressure sensitive adhering means comprises a layer of perforated transfer adhesive material.

12

7. A one way vision display panel assembly according to claim 1 wherein said perforated transparent panel has ultra violet (UV) protective properties.

* * * * *